

REMARKS

Pursuant to the requirements of 37 C.F.R. §§ 1.821-1.825, Applicants submit the enclosed Sequence Listing and computer readable form (CRF). The amino acid sequences disclosed in the specification and drawings may be found in computer readable form in file 991768.APP on the enclosed diskette and are presented in the paper copy of the Sequence Listing, enclosed.

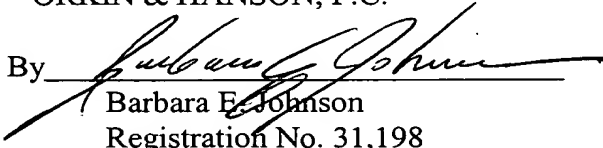
Applicants hereby certify that the Sequence Listing in computer readable form (CRF) supplied on the enclosed diskette as file 991768.APP is the same as the substitute copy of the Sequence Listing attached hereto. The material presented in computer readable form (CRF) is not new matter because it presents sequences the same as those disclosed in the specification, as filed.

Applicants believe that the requirements of 37 C.F.R. §§ 1.821-1.825 have been met.

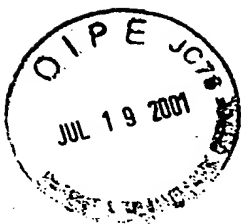
Respectfully submitted,

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MARKED-UP AMENDED CLAIMS

2. (Amended) Peptide fragment derived from ubiquitidine and comprising a continuous series of at least 3 amino acids from the amino acid sequence of ubiquitidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNA
NS, (SEQ ID NO: 1) with the exception of peptides having the amino acid sequence
KVHGSLARAGKVRGQTPKVAKQ (SEQ ID NO: 10) or AGKVRGQTPKVAKQEKKKKKT
(SEQ ID NO: 11).

3. (Amended) Peptide fragment as claimed in claim 2 comprising a continuous series of at least 8 amino acids from the amino acid sequence of ubiquitidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNA
NS, (SEQ ID NO: 1) with the exception of peptides having the amino acid sequence
KVHGSLARAGKVRGQTPKVAKQ (SEQ ID NO: 10) or AGKVRGQTPKVAKQEKKKKKT
(SEQ ID NO: 11).

4. (Amended) Peptide fragment as claimed in claim 2 with one of the following amino acid sequences:

ubiquitidine (1-18)	KVHGSLARAGKVRGQTPK <u>(SEQ ID NO: 2)</u>
ubiquitidine (29-41)	TGRAKRRMQYNRR <u>(SEQ ID NO: 3)</u>
ubiquitidine (18-29)	KVAKQEKKKKKT <u>(SEQ ID NO: 4)</u>
ubiquitidine (18-35)	KVAKQEKKKKKTGRAKRR <u>(SEQ ID NO: 5)</u>
ubiquitidine (29-35)	TGRAKRR <u>(SEQ ID NO: 7)</u>

ubiquitidine (42-59)

FVNVVPTFGKKKGPNANS (SEQ ID NO: 8)

ubiquitidine (36-41)

MQYNRR (SEQ ID NO: 9)

5. (Twice Amended) Derivative of ubiquitidine or of a peptide fragment derived from ubiquitidine and comprising a continuous series of at least 3 amino acids from the amino acid sequence of ubiquitidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS, (SEQ ID NO: 1) which derivative has an amino acid sequence which is at least partly the reverse of the amino acid sequence of the corresponding original peptide.

6. (Twice Amended) Derivative of a ubiquitidine of or a peptide fragment derived from ubiquitidine and comprising a continuous series of at least 3 amino acids from the amino acid sequence of ubiquitidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS, (SEQ ID NO: 1) wherein at least one of the amino acids from the original peptide is replaced by a stereoisomer of that amino acid.

7. (Twice Amended) Derivative of ubiquitidine or of a peptide fragment derived from ubiquitidine and comprising a continuous series of at least 3 amino acids from the amino acid sequence of ubiquitidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS, (SEQ ID NO: 1) wherein the original amino acid chain is extended at one or both ends thereof with one or more groups, such as D-amino acids, protecting against degradation.

8. (Amended) Derivative as claimed in claim 7 with the amino acid sequence:

D-A--KVAKQEKKKKKTGRAKRR--D-A (SEQ ID NO: 6)

in which D-A represents D-alanine

15. (Amended) A peptide fragment derived from ubiquicidine and comprising a continuous series of at least 3, preferably at least 8 amino acids from the amino acid sequence of ubiquicidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNA
NS (SEQ ID NO: 1) for use in diagnostics, prophylaxis or therapy of infections in humans and animals.

22. (Twice Amended) Diagnostic agent, comprising a suitable quantity of one or more active components provided with a detectable label and chosen from ubiquicidine, peptide fragments derived from ubiquicidine and comprising a continuous series of at least 3 amino acids from the amino acid sequence of ubiquicidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKG
PNANS, (SEQ ID NO: 1) or derivative or hybrid molecules thereof by transforming an animal egg-cell with a gene construct which codes for the ubiquicidine, peptide fragment, derivative or hybrid molecule, regenerating a transgenic animal from the transformed egg-cell and isolating the ubiquicidine, peptide fragment, derivative or hybrid molecule from a tissue or bodily fluid of the animal, for instance milk.

MARKED-UP AMENDED ABSTRACT OF THE DISCLOSURE

The invention relates to the use of ubiquicidine or optionally modified peptide fragments derived therefrom for the preparation of a drug for the treatment, diagnostics or prophylaxis of infections in humans and animals. A peptide fragment derived from ubiquicidine comprises for instance a preferably continuous series of at least 3, preferably at least 7-13 amino acids from the amino acid sequence of ubiquicidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPN

ANS (**SEQ ID NO: 1**). Hybrid molecules comprise for instance a cationic peptide with an antimicrobial action and/or a peptide fragment of ubiquicidine and/or a derivative thereof and one or more effector molecules.